IRON AGE

Name of Persons of Persons and Persons and

FARM, GARDEN AND ORCHARD IMPLEMENTS

American Pasters Established Sik

BATEMAN M'F'G CO.,

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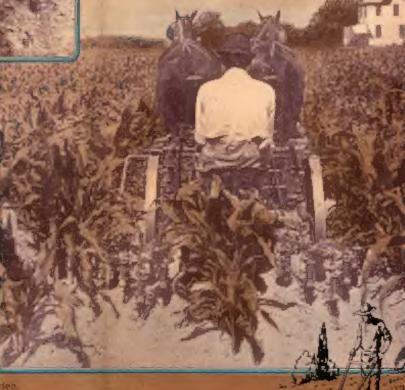
THE BATEMAN-WILKINSON CO.,

Tonis are carried in special recenters of distribution.

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Two Horse Riding and Walking Cultivators

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The Building of a Riding Cultivator

Then the White Man first landed he found an Indian Squaw working in a little patch of corn with a flat stone crudely tied to a piece of stick. "Heap back-ache!"

But the White Man took a lump of iron, hammered it thin and fastened it to a wooden handle with handforged nails. He could work a bigger garden than the Indian, and do it easier.

More people came and built a town. They couldn't all have a garden and a few couldn't grow enough for them all with only a hoe. So the White Man took several hoes, bolted them to a clumsy wooden frame and hauled it around with a horse.

The Horse-Hoe answered for many years. Then men learned that intensive cultivation retained the moisture in the ground and allowed the chemical properties of the air to get to the roots. They planted more acres and a wider variety of crops that demanded a cultivator that would do the greatest amount of work, in the least possible time and that would be easy on the team and easy to operate—in other words, a Two-Horse Riding Cultivator—in two words, an "Iron Age."

They are cultivators with every possible adjustment for gangs, points, wheels and frame—made to operate successfully in any kind of a crop, in any soil and on level or hillside farms. Necessary in potato and trucking sections, they are just as effective in corn.

And then it's a constant satisfaction to have a machine where you can ride and come in at night without being dead tired, with a team nearly as fresh as they were in the morning, and behind you a big day's work well done.

The "Iron Age" line contains single-and double-row machines, with high or low pivot or fixed wheels, grooved, flat or zigzag gang bars and many attachments for fallow work, ridging, close work in tobacco, etc. Then there are Two-Horse Walking Cultivators for the man who wants them.

A complete description follows. Look for the machines at your nearest dealer's and write us as many questions as you like.

If interested, we will be glad to send free booklets on Hand Wheel Cultivators and one-horse tools.

BATEMAN M'F'G CO., GRENLOCH, N. J., U. S. A.



Two Low-Wheel "Iron Age" Riding Cultivators in Potatoes



Low Pivot-Wheel Riding Cultivator

The potato farmer, truck gardener,

or general farmer, needs a cultivator with a wide variety of adjustments, without complicated parts, because he has many things to do, in many different ways. Such a machine is No. 878, with its pivot wheels, hinged gangs, and sliding standards, adjustable for width and angle.

In corn,

the teeth can be set for shallow cultivation close to the plants, deep in center of row, or for perfectly level cultivation.

For beans, tomatoes, etc.,

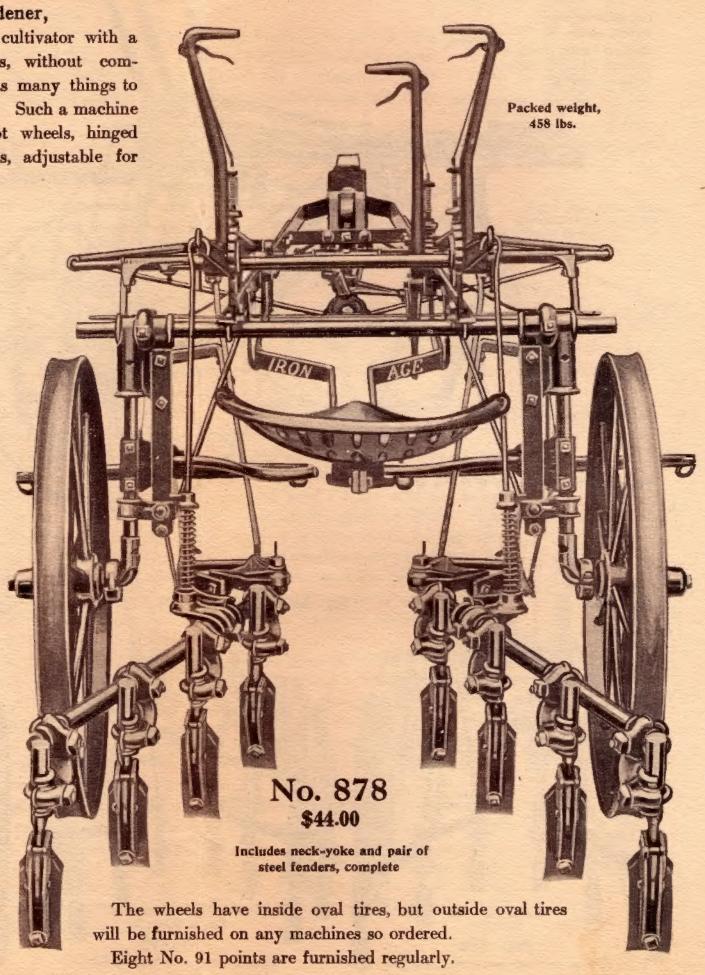
this tool is a close, thorough, convenient worker.

The sugar beet grower

plants close, and needs to narrow up his cultivator for good work—No. 878 can be adjusted for narrower rows than on any other riding cultivator on the market.

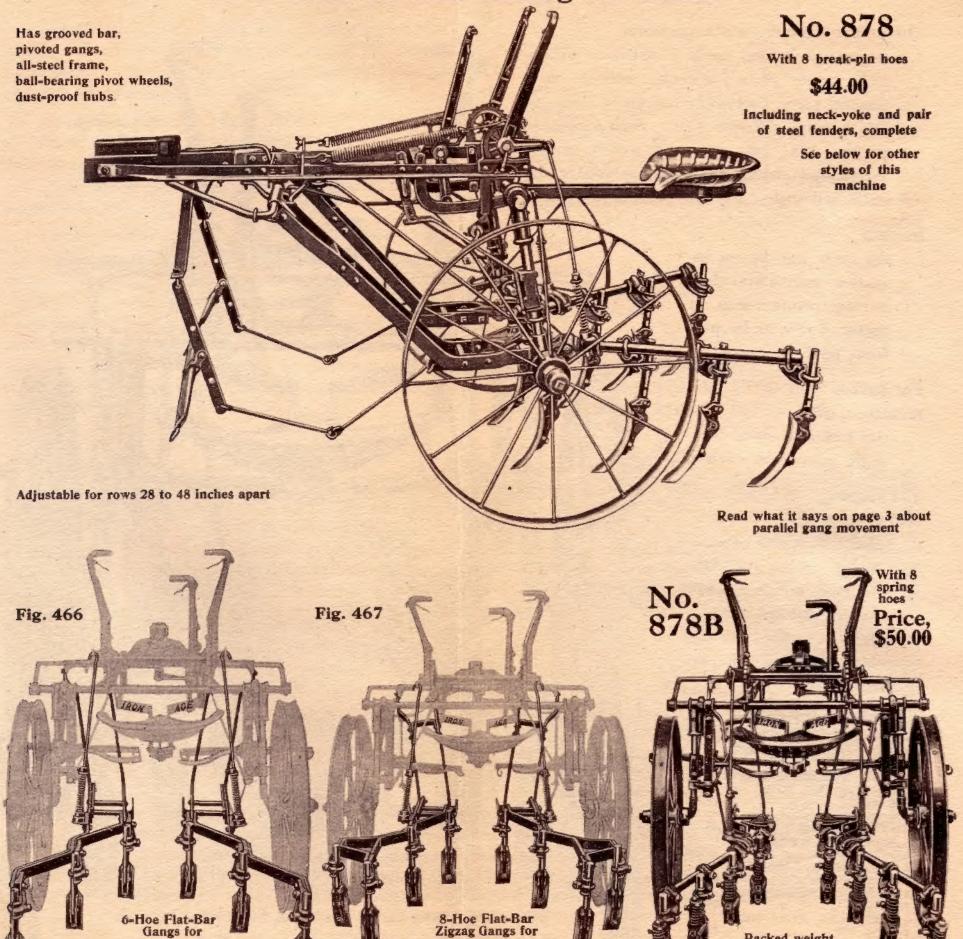
Styles and Prices

No. 878-Grooved Bar, 8-Hoe \$44.00
No. 878A-With Spring Teeth,
see Fig. 370
No. 878B—With Spring Hoes 50.00
No. 886-Flat Bar, 6-Hoe, see
Fig. 466
No. 886A—With Spring Teeth,
see Fig. 371, page 9 40.25
No. 886B-With Spring Hoes,
see Fig. 465
No. 898-Flat Bar, 8-Hoe, Zig-
zag, see Fig. 467 42.00
No. 898A-With Spring Teeth,
see Fig. 371
No. 898B-With Spring Hoes,
see Fig. 465 48.00
Extra Spring Hoes, complete . 1.50
See inside back cover for points and
steels.



BATEMAN MFG CO. IRON AGE SEVENTY-EIGHT YEARS IN BUSINESS

Low Pivot-Wheel Riding Cultivator



No. 898

Price, complete machine, \$42.00

Packed weight,

486 lbs.

Gangs for

No. 886

Price, complete machine, \$41.50



Low Pivot-Wheel Riding Cultivator

No. 878 is a low, pivot-wheel Riding Cultivator with an all-steel frame—the kind that permits the operator to cultivate his own way instead of being limited by soil conditions or want of machine adjustments.

All-Steel Frame

All the wood parts are discarded except the pole and neck-yoke and in their place there is a solid steel frame, angle steel pole connections and patent steel singletrees. The new frame is rigid in itself, but is trussed to make doubly sure that the gang heads are always in line and the gangs shift only in parallel lines.

A Low Wheel

Not that it is any better, but it is built to accommodate the men who

Machine prefer low wheels.

Pivot Wheels

They mean easy guiding with the feet on rolling or hilly ground and short turns at ends of rows. The pivots are fastened low on the axles (Fig. 322) with hardened steel ball bearings at the top to carry the weight of

the machine. The axles are made in one piece.

Wheel Construction

The wheels are 32 inches high, with staggered spokes and 2½-inch oval (inside) tires. Oval (outside) tires are substituted, when ordered, without extra charge.

Hubs

Dust-Proof They live up to their name and a turn of the lubricating cup on the end forces the grease the length of the hub. See Fig. 359 and description on page 7.

Pivoted Gangs

This feature gives you the range you need. (Fig. 321.) They are used only on No. 878. In very close rows special narrow points can be used, even four, five or six on each side, if desirable. They cost little extra money and are furnished only when ordered. The standards on No. 878 only, are carried on grooved bars. They slide on the bar

Grooved Gang Bars

and so can be adjusted to cut in any part of the row, at any angle or depth. The operator can throw the soil to or from the plants or travel straight ahead, cutting deep or shallow. Each tooth is independent. That permits shallow cultivation near the middle or any way you wish. Steel standards, steel bars, steel eye bolts.

Parallel Gang Movement

It keeps the points always facing one way. If set squarely to the front, each point cuts the full 2½ inches. Set them at an angle and the angle is always the same no matter which way the gangs are shifted.

Easy Shift and Lift

One lever shifts both of the gangs, for width, with the team in motion, as easily as when the team is standing. Two or more crops, in the same row can be worked without stopping, or without injuring the plants. Powerful springs and handy leversraise the gangs. Any boy can do it.

Holding Points Down

The tension springs are set far enough back on the gangs and have the right tension to hold the points to their work even when the soil gets hard. But the tension always gives when the points strike obstructions.

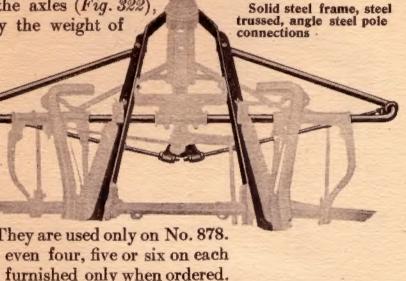
Width of Rows Other Adjustments

28 to 48-inch rows is the range limit for cultivation. The pivoted hinges account for 22 inches, the wheels carry a 22-inch adjustment on the bar and the gang lever does the rest. The seat support can be changed for height and angle, a balance for light or heavy men is regulated by means of two pivot stay braces in front, and the pole can be adjusted for height. For fallow ground or when on the road, the wheels can be fixed in position by putting one bolt through the stay brace and tie strap.

Direct Draft

The horses draw direct from each gang.







FG CO. IRON AG Low Pivot-Wheel Riding Cultivator-Com No. 875 has grocerd-law, piroted gauge—eight hore. No. 866 and 588 have the law rigid gauge, with an and eight hore suspectively. No. 809 has the hose

with spring hors, under by adding the letter "\$" to the number, or No. 8783.



They are used for hilling come or for covering furners. Many men use then for hollow by used wome one law or their whose on each side. The attachment

For riding redrinators with spring tests, special standards and holder will be model. (Order as Fig. 1755 and specify number and style of machine.) It is used for ridging, for turning the soil from growing plants and for

and NCSA, take No. 118-2 attachment. No. 929 uses No. 118-4 and No. 928-5

The ANY A. With spring touch No. or

BATEMAN MFG CO. GRENLOCH, N.J., U.S.A. IRON AGE SEVENTY-EIGHT YEARS IN BUSINESS

Attachments for Riding Cultivators

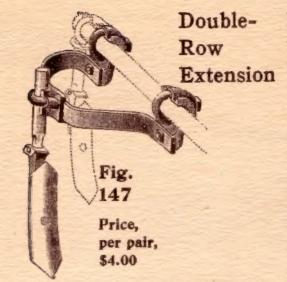


Fig. 261

toes and other crops planted equally close. team straddles one row and this attachment cultivates close to the next row on each side—in other words, you cultivate all of the two middles in rows up to 33 inches wide. Does not leave open furrows next to the crop, as the extra outside

tooth is ahead of the rear tooth on the regular Also valuable for fallow work and cultivating very wide rows, up to 59 inches apart. Used on No. 878 only. If wanted with spring tooth, order Fig. 147S at same price.

Hilling Attachment

Fig. 261

These shovels are used on all Riding and Walking Cultivators and Horse Hoes with entire satisfaction. They will hill crops, take away soil from the plants and cover furrows.

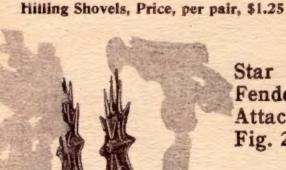


Fig. 285 Solid part shows star fender attachment. Price, \$1.25

Star Fender Attach. Fig. 285

Disc Ridging Attachment

Furnished when ordered, without extra charge, for any Riding Cultivator in place of the regular sheet-steel fenders which

go with every machine sent out. They revolve in the direction in which the machine is going—while they protect from heavy clods of dirt, they also let fine dirt through. To throw up a higher ridge than is possible by the use of plows or regular disc

attachments. It is simply a larger and stronger equipment than the disc attachment. It is applied in place of the cultivating gangs—has 20-inch discs, adjust-

able for depth, width of ridge and angle at which Fig. 484 they are set. This attachment is especially valuable in that part of New England where high ridging of potatoes is practiced. Will fit any of the No. 878 or

608 series. If wanted for old No. 82 series, order Fig. 284.

The engraving shows it applied on No. 878; takes two to work it, one on the upper seat to drive and the other sits behind to operate the independent gangs in tobacco and other crops, where it is desirable to work close to the plants and between the hills, get perfectly level cultivation and keep weeds out. Each of these independent gangs has three narrow, reversible diamond-shaped teeth with cultivator tooth forged on one end and harrow tooth on the other. One or more teeth can be taken off—trashy soil may make it necessary to use but two. Each independent gang pivots in front and tension springs keep them in the ground.—Gangs are raised easily at ends of rows. The attachment is constructed so that the front inside regular cultivator teeth can be set forward, where they break up the soil ahead of the narrow teeth-heretofore they could not be used at all. Tobacco attachments for other machines are as follows: No. 60 takes Fig. 4681; Nos. 82, 140 take Fig. 4682; Nos. 83, 84 take Fig. 4683; Nos. 63, 86 take Fig. 4684; Nos. 608, 626 take Fig. 4687.

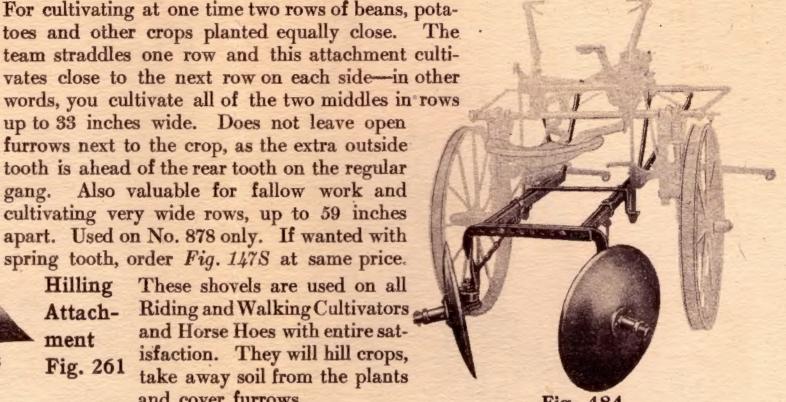
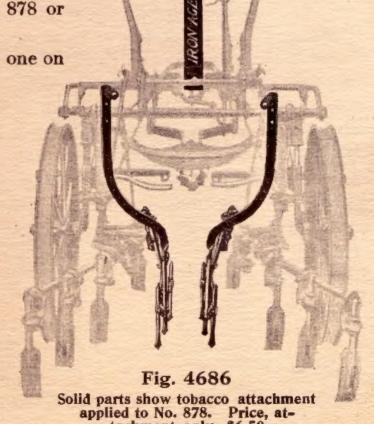


Fig. 484 Solid parts show disc ridging attachment on No. 878. Price, attachment only, \$12.50



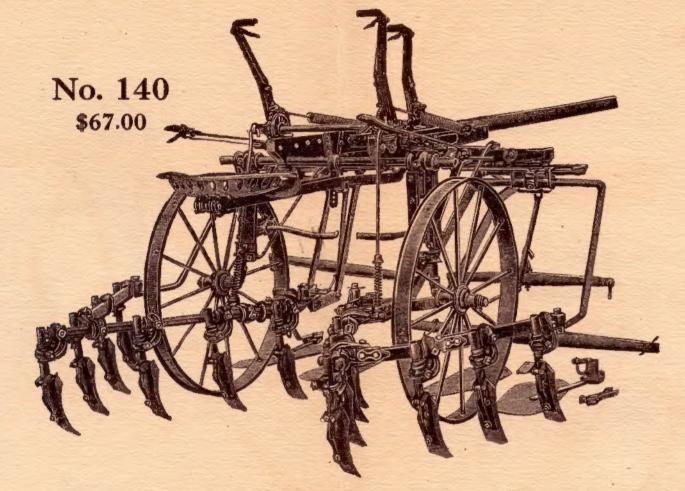
tachment only, \$6.50

Tobacco Attachment Fig. 4686



Double- and Single-Row Pivot-Wheel Riding Cultivator

Works rows 28 to 44 inches apart



A fine machine on big farms, in long rows

Prices include neck-yoke and two pairs of steel fenders, complete

If wanted with spring teeth, order No. 140A

Price, \$64.50

Takes
14 No. 97 points

Packed weight, 645 lbs.

The Need for Two-Row

Suppose you are planting a large acreage of potatoes. You know the principles of thorough cultivation—that after each rain you must get over the ground at once or it will bake in the sun. Then it will be harder to work and the result is much less satisfactory. Now, suppose you buy two single-row machines in order to get over the ground quicker—that means four horses and two men—a double-row cultivator takes but two horses and one man. If your acreage is large, more than one double-row machine would be necessary, and single-row machines would nearly double your expense.

A Real Time Saver

No. 140 is right at home on big farms where the rows are long, for it travels astride one row and thoroughly cleans up two middles that are not over 44 or under 28 inches apart. And the spaces may be irregular and yet be properly worked.

For Single Rowsalso

The Cultivator can be used also for single rows by taking off the outside sections. On hillsides or the first time through on hard, baked ground, it is usually better to use the one-row form. It saves draft and the operator gets around easier.

Inside Gang Sections Outside

Sections

They have grooved, hinged bars which you can adjust for any width row within the range and any kind of cultivation needed—shallow or deep, to or from the plants, and as close to the rows as you wish.

Have flat steel gang bars and three cultivating points which can be shifted to any position on the bar. The rear point of these three is attached to separate jointed section of the bar and can be moved to let trash out of the pocket formed by the three points back of each wheel. The outside gangs are attached to main cross bar without a front arch—simple construction but strong and rigid. Horizontal levers shift each outside section separately, about eight inches. They save misplaced or bushy plants and help you to cultivate as close as desired. No crops will be knocked down in turning at ends of rows.

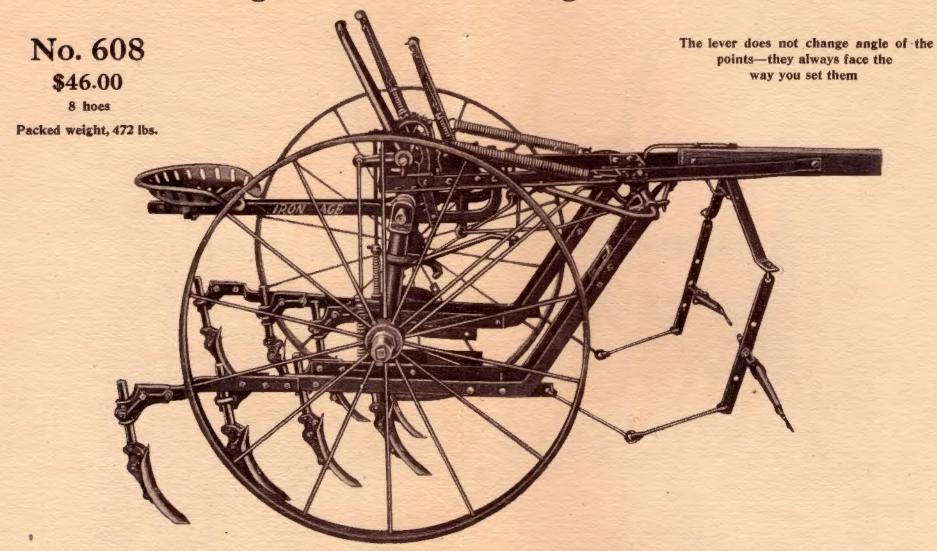
Points

Regular, two-inch. If needed, 11/4- or 21/2-inch will be furnished.

Attachments No. 140 takes Figs. 117, 118, 140, 261, shown on pages 4 and 5. In ordering, please specify that they are wanted for No. 140.



High Pivot-Wheel Riding Cultivator



Steel Frame

High pivot wheels and flat gang bars keep this machine and No. 878 from being twins. The steel frame and the angle-steel pole connections are practically the same. The machine is bound to be rigid, the gang heads are always in line and the levers give the operator control of all working parts.

Pivot-Wheel Machine Pivot wheels make the work easier on hillsides or in crooked or irregular rows. The operator guides the machine with his feet, swinging the gangs either way by turning the wheels. It takes a bit of practice to operate a pivot-wheel machine, so try it at first with a slow, steady team.

A ball-bearing of hardened steel carries the weight without friction and helps with the guiding.

A High-Wheel Machine The 42-inch wheels are furnished for the man who prefers them to low wheels. They are built with staggered spokes, channel tires that stay with the work on hillsides, and a dust-proof removable hub box, which is cheaply replaced. A hinged ring with one bolt holds the wheel in place, (at the left of hub in Fig. 359). One bolt through the stay brace and tie strap locks the wheels in place when you want to use it as a fixed-wheel cultivator.

Dust-Proof Hub No sand or dust can get inside the hub. It is protected on the outer end by a grease cup with cap (Fig. 359). It is filled with grease and then forced the length of the axle by a single turn of the cap on the threaded hub. Grease also fills a small chamber in the hub box to prevent heating.





BATEMAN MFG CO. IRON AGE YEARS IN BUSINESS

High Pivot-Wheel Riding Cultivator

Flat Steel Gangs The gangs are flat steel bars properly put together for strength and rigidity. Two In close grown crops the outside sections can be taken off; likewise, the inside sections for a heavy crop.

The position of the wheels on the arch bar controls the range of cultiva- and for Width of Rows tion, 39 to 50 inches. The distance between the gangs is regulated by an adjuster lever. You can shift with the team in motion and cultivate without injury, two or more crops in the same row.

Easy Both gangs lift as easy as on the No. 878, and both may be raised at once by Lift putting pins through lever and shaft.

Points Set As You Want Them You can throw soil to or from the plants and regulate the depth of the points. The standards are adjustable separately for depth and angle, and can be removed by loosening one nut. The points are 21/2-inch (11/4 or

Price, com-plete, \$1.50 3½, if ordered) and they always travel at the same angle because the gangs are shifted in parallel lines.

The points never tip in rough going. Tension springs hold them to their work, yet the tension Points Held to Their Work always gives when the points strike obstructions. Pressure is released by loosening a small collar. Heavy men or light find the right balance by changing the forward end of the pivot stay brace, the

Are You Heavy?

Draft

seat support is adjustable for height and angle, and the pole for height. The horses draw directly from each gang, using a steel evener and steel singletrees.

Equipment

Furnished with eight hoes (No. 608) or six (No. 626) and spring-pressure lock-down. Fig. 470 shows No. 638 Riding Cultivator with zigzag gangs-the points are placed to give better clearance for trash, or for soil which has not been thoroughly broken up and pulverized.

When wanted with spring teeth (Fig. 371), add letter "A" to the number, as No. 608A. When with new spring hoes (Fig. 465), add letter "B" to the number, as No. 608B.



6-hoe gangs for No. 626

Price, complete machine, \$43.50

To Change from If you have break-pin hoes Break-Pin to with standards, No. E376, Spring Hoes and want to change to spring

> slip these extra parts on the standards. Price, set of six, to change, \$4.50. Price, set of eight, to change, \$6.00.

Attachments

All of those shown on pages 4 and 5 are used on these Riding Cultivators, except Fig. 147.



ments

-for depth

Fig. 465

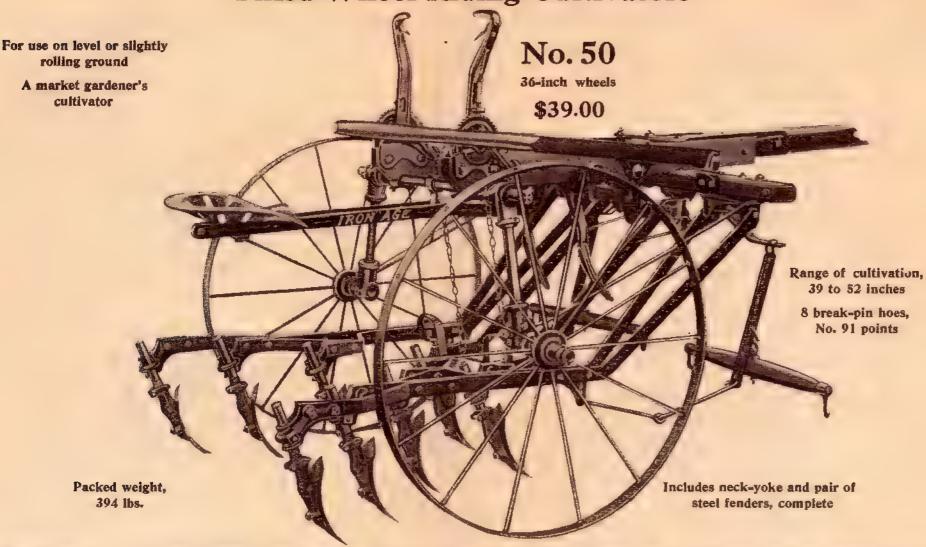
Fig. 371

For flat-bar

gangs

BATEMAN MFG CO. IRON AGE SEVENTY-EIGHT YEARS IN BUSINESS

Fixed-Wheel Riding Cultivators



For Level Ground

Strong, Convenient Gangs

Can Work
Around
Each Plant

Of Special Interest to Market Gardeners

Spring-Pressure Lock-Down For the market gardener and general farmer who cultivates level or slightly rolling ground, No. 50 is an O. K. machine. We have been making it for 22 years and all of this time it has done thorough work. Because it carries fixed wheels it is not so good for side hills.

The gangs are of the flat steel bar kind—strong and rigid. The inside teeth are independent and operated as described below. The outside sections are fixed in front and braced, and are adjustable in slots in the cross bar to suit the various width rows. The rear outside sections of each gang can be removed—it is sometimes necessary to use six hoes in narrow rows.

Old-timers guided gangs with their feet. It was hard work; no fun at all to use a rider. But now a patent gang lever does the trick. Shifting the lever to the left or right steers the independent points around misplaced hills or bushy plants and depressing the lever brings the points together between the hills. All the plants get close and thorough cultivation.

No other Riding Cultivator can do this and it is just what the market gardener wants—he is looking for exact work, especially among small plants. Foot loops are attached to the independent gangs and they can be used where both hands are needed for driving, or when the machine is used without the side lever and yoke that controls the independent gangs.

A chain lift raises and carries the independent gangs at the proper height. Ordinarily, the feet give all the extra pressure on the gangs that is needed.

Like those on Nos. 878 and 608. Furnished when ordered (see list opposite). They hold the points in the ground with all the necessary pressure, yet the pressure always gives when the points strike obstructions and there is little, if any, danger of breaking the points.

Fig. 465
Price, complete, \$1.50
See page 4

Fixed-Wheel Riding Cultivators

Point Standards They are the same as used on Nos. 878 and 608 Cultivators and have the same adjustments for depth and angle.

The Points

The regular style are 21/2 inches wide, but we can furnish, when ordered, points 11/4 and 31/2 inches wide. (See list on inside back cover.)

Other

The seat support is adjustable in height Adjustments and angle. A steel evener is used and the draft is direct from each gang.

Range of Cultivation

Any width rows, 39 to 52 inches apart, representing space between the wheels.

Choice of Equipment Either 36- or 42-inch steel wheels, flat rim. With chain lift or with springpressure lock-down or without side lever and yoke. If wanted with gangs arranged as in No. 536, six hoes, add the figure "6" to the number. If spring hoes (Fig. 465) are wanted in place of break-pin hoes, add letter "B" to the number as No. 50B.

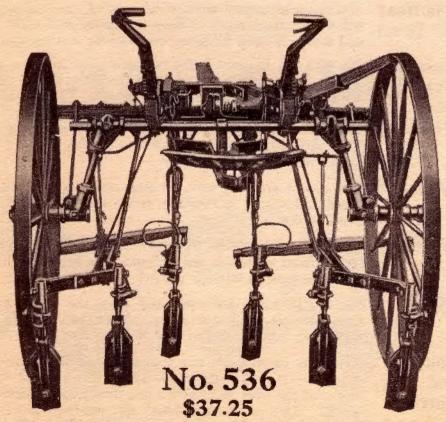
This Cultivator cannot be equipped with spring teeth.

Attachments No. 50 takes Figs. 117, 140, 261 and 285 shown on pages 4 and 5.

Styles and Prices

	407100
No. 50B—With Spring Hoes, (see Fig. 465)	45.00
No. 506—No. 50 with 6 hoes	36.50
No. 506B—No. 50B with 6 hoes	
No. 51—With Lock-Down	41.50
No. 51B—With Spring Hoes (see Fig. 465)	47.50
No. 52-Without Side Lever and Yoke	37.75
No. 52B—With Spring Hoes, (see Fig. 465)	43.75
No. 526—No. 52 with 6 hoes	35.25
No. 526B-No. 52B with 6 hoes	39.75
No. 53-With Chain Lift and 42-inch wheels	
No. 53B—With Spring Hoes, (see Fig. 465)	47.00
No. 536—No. 53 with 6 hoes	37.25
No. 536B—No. 53B with 6 hoes	41.75
No. 54—Same as No. 52 with 42-inch wheels	39.75
No. 54B—With Spring Hoes, (see Fig. 465)	
No. 546—No. 54 with 6 hoes	
No. 546B—No. 54B with 6 hoes	
Extra Spring Hoes, complete	

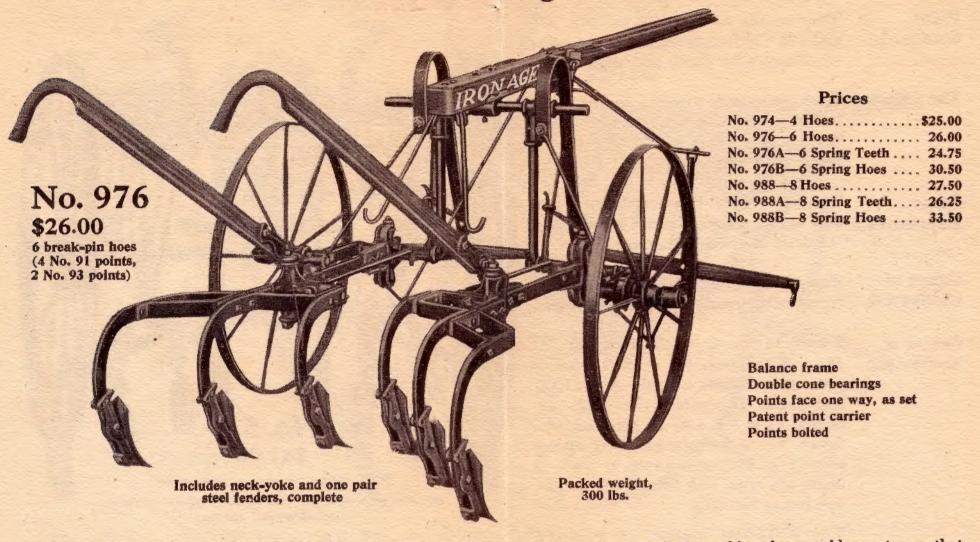




Riding Cultivator, with 6 hoes, 42-inch wheels and short arches Packed weight, 398 lbs.



Two-Horse Walking Cultivators



The Need for Them

Walking Cultivators answer the need of many a man who wants a lower priced machine than a rider, yet one that will do thorough work. They are easier on a team than a rider, easier on the man than a one-horse hoe and they will work on steep hillsides, on stony or stumpy ground and in high grown crops where a rider cannot be used.

Balance Frame and Bearings

No. 976 is a balance frame machine—the relative position of frame and wheels does not change whether the gangs are in the ground or hung up. Double cone bearings carry the gangs. They reduce friction in operation and one nut in a slotted hole takes up the wear. The gangs have pivot joints and shift in parallel lines with the points always facing one way.

They are adjustable for the size of the crop-51/2

inches on each side.

Wheels

The wheels are steel with flat rims and sand- and dustproof hubs with lubricating cups, same as on Nos. 878 and 608.

Width of Rows

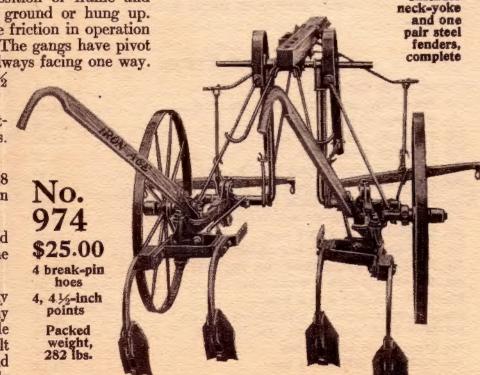
Wheels are adjustable on the arch for rows 36 to 48 inches from center to center, and the cultivator can safely be used in 28-inch rows.

Axles

Short stub axles are used and they are easily and cheaply replaced when worn. Most balance frame cultivators have arch and axle in one piece.

Points and Carriers

The point carriers are our patent-something entirely different—they are adjustable up or down or at any angle on the oval surface of a practically indestructible block. The points are bolted, not riveted—one bolt holds point, block carrier and washer. You will find this a real convenience and the parts are cheaply



Includes

Two-Horse Walking Cultivators

replaced. For Nos. 976 and 988, 21/2-inch points (No. 91) are furnished for the inside and 31/2-inch (No. 93) for the outside. Any size points will be furnished that are needed. For No. 974 a new 4½-inch point is used.

Handles

The handles are adjustable to permit the operator to work astride the row or at one side.

Machine

Four-Hoe In hard or stony ground where the crop is planted close together, a four-hoe machine (No. 974) with wide points does better work. It will tear up the ground where narrow points would merely scratch the surface without doing any good. Set-over frame blocks are made to give the right spacing for this machine and 4½-inch cultivator points are used.

Spring Teeth

Spring teeth are best for level cultivation. They leave a fine soil mulch which helps to retain the moisture in time of drought and yet it is loose enough to let the chemical parts of air unite and work on the soil for the benefit of the plants. Order by adding letter "A" to the number, as No. 988A.

Other Equipment

Walking Cultivators are furnished with four, six or eight hoes. Regularly with break-pin hoes, or with spring hoes by adding the letter "B" to the number, as No. 976B.

Attachments

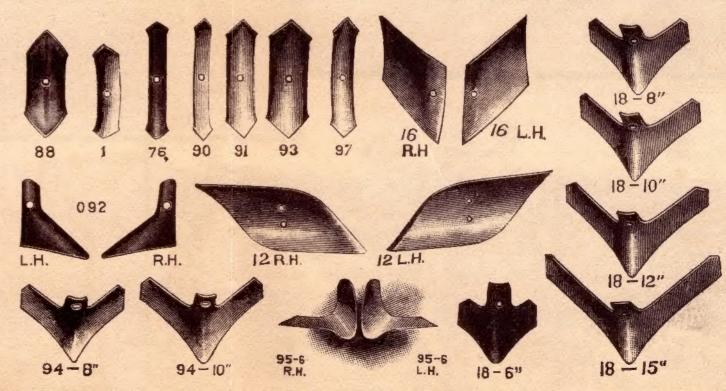
Plow attachments similar to Fig. 117, on page 4, can be used on these Two-Horse Walking Cultivators, but they should be ordered as Fig. 117W. Price, \$1.00 per pair.

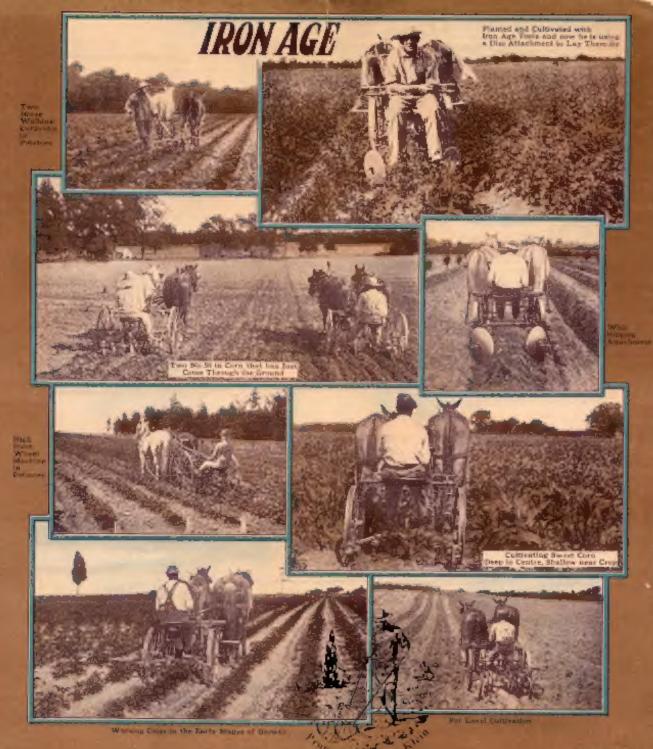


Points and Steels No. 1—2 inches. \$0.10 No. 12—R. or L. .30 No. 16—R. or L. .25 No. 18—6 inches. .28	No. 18—12 inches	No. 90—1¼ inches \$0.18 No. 97—2 inches .19 No. 91—2½ inches .20 No. 93—3½ inches .22 No. 94— 8-inch Sweep .28
No. 18— 8 inches	For Riding Cultivators only	No. 94—10-inch Sweep
No. 18—10 inches	No. 76—1½ inches\$0.18	No. 95— 6-inch Side Hoes

Points and Steels

These are made of highest grade of material—all points are double end, of course, and re-inforced by upsetting at the tips so that they give twice the wear of ordinary points. No. 1 is used only on spring tooth machines-Nos. 12, 16. 18 may be used if needed, and the others are used only on Riding Cultivators of the complete "Iron Age" line.





BARRIOTH STREET